

Abstract

Methods and apparatus for occluding blood flow within a blood vessel. In a first series of embodiments, the present invention comprises a plurality of embolic devices deployable through the lumen of a conventional catheter such that when deployed, said embolic devices remain resident and occlude blood flow at a specific site within the lumen of the blood vessel. Such embolic devices comprise either mechanical embolic devices that become embedded within or compress against the lumen of the vessel or chemical vaso-occlusive agents that seal off blood flow at a given site. A second embodiment of the present invention comprises utilization of a vacuum/cauterizing device capable of sucking in the lumen of the vessel about the device to maintain the vessel in a closed condition where there is then applied a sufficient amount of energy to cause the tissue collapsed about the device to denature into a closure. In a third series of embodiments, the present invention comprises the combination of an embolization facilitator coupled with the application of an energy force to form an intraluminal closure at a specified site within a vessel.